

## IN THE CLAIMS

Please amend claims 22, 32, 34, and 35 as set forth below. Please cancel claims 1-8, 11-16, 19-21, 29-31, 33, 36, 39, and 42-44 without prejudice or disclaimer. Claims 9-10 and 17-18 were previously canceled. All pending claims and their present status are produced below.

1-21. (Canceled)

22. (Currently amended) A driver for driving an LCD (liquid crystal display) panel associated with  $i$  number of scan lines and  $j$  number of column lines, said  $i$  and  $j$  being positive integers not less than 2, the driver comprising:

a display data memory for storing display data, the display data memory arranged in a matrix corresponding to the  $i$  number of the scan lines and the  $j$  number of the column lines and concurrently outputting the display data corresponding to a scan block corresponding to  $m$  number of the scan lines and said  $j$  number of the column lines, said  $m$  being a positive integer not less than 2 and not more than  $i$ ; and

a column signal circuit for generating column display signals by modifying the concurrently output display data, the column display signals generating a display on the LCD panel in accordance with the concurrently output display data ~~The driver of claim 14~~, wherein said column signal circuit comprises:

an XOR (exclusive OR) block including  $j$  number of XOR sets for performing exclusive OR operations between the concurrently output display data and orthogonal function data to determine mismatches, each XOR set

17 including  $m$  number of XOR gates corresponding to the  $m$  number of  
18 the scan lines in each scan block.

1 23. (Previously presented) The driver of claim 22, wherein said column signal  
2 circuit further comprises:

3 a decoder block including  $j$  number of decoders, the decoders for decoding results of  
4 the exclusive OR operations to determine mismatch numbers.

1 24. (Previously presented) The driver of claim 23, wherein said column signal  
2 circuit further comprises:

3 a level-shifter block including  $j$  number of level shifters, the level shifters for shifting  
4 the data levels of the mismatch numbers to different data levels.

1 25. (Previously presented) The driver of claim 24, wherein said column signal  
2 circuit further comprises:

3 a voltage selector block including  $j$  number of voltage selectors, the voltage selectors  
4 for selecting voltage levels corresponding to the mismatch numbers.

1 26. (Previously presented) The driver of claim 25, wherein  $m$  is 3.

1 27. (Previously presented) The driver of claim 26, wherein each of said level  
2 shifters is a 1-bit level shifter.

1 28. (Previously presented) The driver of claim 27, wherein each of said voltage  
2 selectors selects one voltage level from 2 voltage levels.

1 29-31. (Canceled)

1 32. (Currently amended) A liquid crystal display, comprising:

2        a LCD (liquid crystal display) panel associated with  $i$  number of scan lines and  $j$   
3                number of column lines, said  $i$  and  $j$  being positive integers not less than 2;  
4        a row driver for selecting the scan lines;  
5        a column driver for driving the column lines;  
6        a display data memory for storing display data, the display data memory arranged in a  
7                matrix corresponding to the  $i$  number of the scan lines and the  $j$  number of the  
8                column lines and concurrently outputting the display data corresponding to a  
9                scan block corresponding to  $m$  number of the scan lines and said  $j$  number of  
10               the column lines, said  $m$  being a positive integer not less than 2 and not more  
11               than  $i$ ; and  
12        a column signal circuit for generating column display signals by modifying the  
13               concurrently output display data, the column display signals generating a  
14               display on the LCD panel in accordance with the concurrently output display  
15               data The liquid crystal display of claim 29, wherein the column signal circuit  
16        comprises:  
17        an XOR (exclusive OR) block including  $j$  number of XOR sets for performing  
18               exclusive OR operations between the concurrently output display data  
19               and orthogonal function data to determine mismatches, each XOR set  
20               including  $m$  number of XOR gates corresponding to the  $m$  number of  
21               the scan lines in each scan block;  
22        a decoder block including  $j$  number of decoders, the decoders for decoding  
23               results of the exclusive OR operations to determine mismatch  
24               numbers;

a level-shifter block including  $j$  number of level shifters, the level shifters for shifting the data levels of the mismatch numbers to different data levels; and  
a voltage selector block including  $j$  number of voltage selectors, the voltage selectors for selecting voltage levels corresponding to the mismatch numbers.

33. (Canceled)

34. (Currently amended) A method for driving an LCD (liquid crystal display) panel associated with  $i$  number of scan lines and  $j$  number of column lines, said  $i$  and  $j$  being positive integers not less than 2, the method comprising the steps of:

concurrently retrieving display data from a scan block of a display data memory, the display data memory arranged in a matrix corresponding to the  $i$  number of the scan lines and the  $j$  number of the column lines and the scan block corresponding to  $m$  number of the scan lines and said  $j$  number of the column lines, said  $m$  being a positive integer not less than 2 and not more than  $i$ ; and generating column display signals by modifying the concurrently retrieved display data, the column display signals generating a display on the LCD panel in accordance with the concurrently retrieved display data, wherein modifying the concurrently retrieved display data comprises applying orthogonal function data to the concurrently retrieved display data by performing exclusive OR operations between said concurrently retrieved display data and said orthogonal function data to determine mismatches ~~The method of claim 3,~~ wherein the exclusive OR operations are performed on said concurrently

17           retrieved display data without storing said concurrently retrieved display data  
18           in data latches prior to the exclusive OR operations.

1           35.     (Currently amended)     A method for driving an LCD (liquid crystal display)  
2     panel associated with  $i$  number of scan lines and  $j$  number of column lines, said  $i$  and  $j$   
3     being positive integers not less than 2, the method comprising the steps of:  
4           concurrently retrieving display data from a scan block of a display data memory, the  
5           display data memory arranged in a matrix corresponding to the  $i$  number of  
6           the scan lines and the  $j$  number of the column lines and the scan block  
7           corresponding to  $m$  number of the scan lines and said  $j$  number of the column  
8           lines, said  $m$  being a positive integer not less than 2 and not more than  $i$ ; and  
9           generating column display signals by modifying the concurrently retrieved display  
10          data, the column display signals generating a display on the LCD panel in  
11          accordance with the concurrently retrieved display data, wherein generating  
12          column display signals comprises:  
13          applying orthogonal function data to the concurrently retrieved display data by  
14                 performing exclusive OR operations between said concurrently  
15                 retrieved display data and said orthogonal function data;  
16          decoding results of the exclusive OR operations to determine mismatch  
17                 numbers; and  
18          shifting the data levels of the mismatch numbers to different data levels ~~The~~  
19                 ~~method of claim 5~~, wherein the data levels of the mismatch numbers  
20                 are shifted without storing the mismatch numbers in output latches  
21                 prior to the step of shifting the data levels of the mismatch numbers.

1           36.     (Canceled)

1           37.     (Previously presented)   The driver of claim 22, wherein the XOR block is  
2 directly coupled to the display data memory to perform the exclusive OR operations on said  
3 concurrently output display data without storing said concurrently output display data in data  
4 latches prior to the exclusive OR operations.

1           38.     (Previously presented)   The driver of claim 24, wherein the level-shifter  
2 block is directly coupled to the decoder block to shift the data levels of the mismatch  
3 numbers to different data levels without storing the mismatch numbers in output latches.

1           39.     (Canceled)

1           40.     (Previously presented)   The liquid crystal display of claim 32, wherein the  
2 XOR block is directly coupled to the display data memory to perform the exclusive OR  
3 operations on said concurrently output display data without storing said concurrently output  
4 display data in data latches prior to the exclusive OR operations.

1           41.     (Previously presented)   The liquid crystal display of claim 32, wherein the  
2 level-shifter block is directly coupled to the decoder block to shift the data levels of the  
3 mismatch numbers to different data levels without storing the mismatch numbers in output  
4 latches.

1           42-44. (Canceled)